IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 09/827,686 Applicant: Rizzotto et al.

Filed: April 6, 2001

Title: CHEWABLE FLAVOR DELIVERY SYSTEM

TC/A.U.: 1731

Examiner: Dionne A. Walls

Confirmation No.: 5077

Notice of Appeal Filed: November 12, 2003

Docket No.: PAR-100US

APPEAL BRIEF UNDER 37 C.F.R. § 1.192

Mail Stop Appeal Brief-Patents Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

SIR:

The Applicants (now Appellants), appeal from the Final Rejection dated June 12, 2003, which finally rejected claims 1, 4-9, 18 and 22-26 of the subject application. A Notice Of Appeal together with a request for a two month Extension of Time were filed under a Certificate of Mailing dated November 12, 2003, and acknowledged as being received on November 21, 2003, by the United States Patent and Trademark Office.

I. REAL PARTY IN INTEREST

The real Party In Interest is the Assignee Partmers Inc. having a business address of 65 South Green Street, Nazareth, PA 18064

II. RELATED APPEALS AND INTERFERENCES

The are no related appeals or interferences known to Appellants or the Appellants' legal representative, which would directly affect, be directly affected by or have a bearing on the Honorable Board's Decision in this Appeal.

III. STATUS OF CLAIMS

Claims 1 and 18 are independent claims. Claims 4 and 9 depend on claim 1 and claims 5 and 6 depend on claim 4. Claims 22-26 depend on claim 18. Appellants note in the amendment filed in the Response to the Office Action of December 6, 2002, claim 23 should have been amended to depend on claim 18, since claim 21 was cancelled. Appellants are submitting herewith an Amendment Under 37 CFR 1.116 to correct this error.

Claims 10-17 and 27-35 were cancelled in an Amendment filed under a Certificate of Mailing dated September 17, 2002. Claims 10-17 and 27-35 were cancelled without prejudice to Appellants right to file one or more divisional applications thereon.

IV. STATUS OF AMENDMENTS

The above-identified application was filed on April 6, 2001. The original application contained 35 claims.

In a first Office Action dated June 19, 2002, the Examiner rejected claims 1-9 and 18-26 and withdrew from consideration claims 10-17 and 27-35 based upon a telephone interview with Appellants legal representative on 10 June 2002. The Examiner has alleged the presence of three separate inventions in the application, the inventions were classified as:

 Claims 1-9 and 18-26 drawn to a chewable flavor delivery system/oral tobacco substitute, classified in Class 131 Subclass 352; II. Claims 10-17, drawn to a flavor delivery system, classified in Class 426 Subclass 640; and

III. Claims 27-35, drawn to a tobacco substitute, classified in Class 131 Subclass 352.

In addition, the Examiner rejected claims 1-8 and 18-25 under 35 U.S.C. § 103(a) over Buchmann et al. U.S. Patent 3,867,951.

Appellants filed an amendment under Certificate of Mailing dated 17 September 2002. Appellants cancelled claims 10-17 and 27-36 without prejudice thereby affirming the provisional election made by Appellants' legal representative in a telephone conversation with the Examiner on 10 June 2002, and argued the impropriety of the rejection of claims 1-9 and 18-26.

The Examiner issued a Non-Final Rejection on December 6, 2002. The Examiner rejected claims 1-2, 7-8, 18-19, 24-25 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative under 35 U.S.C. § 103(a) as obvious over Finberg U.S. Patent 3,067,068. The Examiner also rejected claims 3-6 and 20-23 under 35 U.S.C. § 103(a) over Finberg in view of Garber U.S. Patent 2,331,830. Claims 9 and 26 were rejected under 35 U.S.C. § 103(a) over Finberg et al. in view of Nonomura et al. U.S. Patent 5,597,400 and Payne U.S. Patent 4,946,697. Appellants filed an amendment under Certificate of Mailing dated 3 April 2003, together with a request for a one month Extension of Time. In the amendment, Appellants cancelled claims 2, 3 and 19-21. Appellants amended claims 1, 4-6, 9, 18, 22-23 and 26 and argued the impropriety of the rejection of claims remaining in the application.

The Examiner issued a Final Rejection on June 12, 2003. The Examiner rejected claims 1, 4-8, 18, 24-25 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Finberg U.S. Patent 3,067,068. The Examiner rejected claims 1, 4-6, 8, 18, 23 and 25 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative under 35 U.S.C. § 103(a) as obvious over Aebi et al. U.S. Patent 5,368,873. The Examiner rejected claims 4-6 and 22-23 under 35 U.S.C. § 103(a) over Finberg in view of Garber U.S. Patent 2,331,830. The Examiner rejected claims 9 and 26 under 35 U.S.C. § 103(a) over

Aebi in view of Nonomura et al. U.S. Patent 5,597,400. The Examiner rejected claims 1 and 4-8 under 35 U.S.C. § 103(a) over Rozacky et al. U.S. Patent 3,702,615.

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Appellants reviewed the Final Rejection and believing that the Examiner did not fully appreciate nor respond to the Amendments filed in Response to the first two Office Actions came to the conclusion that an amendment after final would be of no benefit to Appellants. Appellants believe the Examiner will use their own teaching to continually search the art to frame rejections that do not really negate patentability of their invention. In view of this conclusion Appellants filed a Notice of Appeal under Certificate of Mailing dated November 12, 2003, together with the necessary request for Extension of Time.

V. SUMMARY OF INVENTION

Appellants' invention resides in a provision of a chewable flavor delivery system or a flavor delivery system that can be enclosed in a pouch for oral use by a user. Appellants' invention does not concern providing smoking tobacco substitutes. Appellants' product has not been tested as a smoking substitute and would be totally destroyed if put to the match.

Appellants' invention has two key aspects that are neither taught nor suggested by the prior art singly or in combination. These are a carrier consisting of an edible cellulosic plant material dried to a moisture content of at or below 8% percent by weight, with the plant material having at least 30% intact cell walls.

Beyond the features set out above, Appellants' system is enhanced by using a water soluble but not water containing flavor ingredient in liquid form that is capable of entering the intact cell walls of the plant material, where it is held and provides a slow release during the chewing of the cellulosic plant material, if it is in loose form.

Thus, in a first aspect Appellants invention is a flavor delivery system comprising in combination; a carrier consisting of an edible cellulosic plant material being 100% cabbage leaves prepared by one of, forming into strands or granular form dried to a moisture content of at or below 8% by weight, the cabbage leaves

having at least 30% intact cell walls, a water soluble but not water containing flavor ingredient in liquid form and capable of entering intact cell walls of the cabbage leaves, and an effective amount of a food safe humectant.

In another aspect the present invention is an oral tobacco substitute comprising in combination; an edible cellulose plant material being 100% cabbage leaves chopped or ground into a granular form and sized to pass a 16 mesh screen and be retained on a 30 mesh screen of a U.S. standard sieve series of screens dried to a moisture content at or below 8% by weight, the granular cabbage leaves having at least 30% intact cell walls, a water soluble but not water containing flavoring ingredient in liquid form and capable of entering intact cell walls of the granular cabbage leaves, and an effective amount of a food safe humectant.

Claims 1, 4-6 and 9 are drawn to a chewable flavor delivery system.

Claims 18, 22-23 and 26 are drawn to an oral tobacco substitute.

Appellants respectfully contend that the present claims are patentable over Finberg U.S. Patent 3,067,068, Aebi et al. U.S. Patent 5,368,873, Garber U.S. Patent 2,331,830, Nonomura et al. U.S. Patent 5,597,400, Payne U.S. Patent 4,946,697, and Rozacky et al. U.S. Patent 3,702,615 as well as any art of record in the application. None of the art available at the time Appellants made their invention would have led a worker skilled in the art to solve the problems addressed by Appellants. Even, assuming that the references were combined, the claimed invention is patentably distinct from those references combined in the absence of further modification of the combination, which modification can only be accomplished by using Appellants' own teaching to not only select but to interpret the references. Lastly, Appellants contend each of the cited references individually teach away from the modifications necessary to the references either individually or collectively to achieve Appellants' invention.

VI. ISSUES

(1) Were claims 1, 4-8, 18, and 24-25 properly rejected under 35 U.S.C. § 102(b) or in the alternative under 35 U.S.C. § 103(a) over Finberg.

- (2) Were claims 1, 4-6, 8, 18, 23 and 25 properly rejected under 35 U.S.C. § 102(b) or in the alternative under 35 U.S.C. § 103(a) over Aebi et al.
- (3) Were claims 4-6 and 22-23 properly rejected under 35 U.S.C. § 103(a) over Finberg in view of Garber.
- (4) Were claims 9 and 26 properly rejected under 35 U.S.C. § 103(a) over Aebi in view of Nonomura et al.
- (5) Were claims 1 and 4-8 properly rejected under 35 U.S.C. § 103(a) over Rozacky et al.
- (6) Was claim 9 properly rejected under 35 U.S.C. § 103(a) over Rozacky in view of Nonomura et al.

VII. GROUPING OF CLAIMS

Claims 1, 4-6 and 9 stand as one embodiment of the invention.

Claims 18, 22-23 and 26 stand as a second embodiment of the invention.

VIII. ARGUMENT

For the reasons set forth below Appellants respectfully submit that the Final Rejection was improperly made and should be withdrawn.

Appellants have defined their invention with features that are neither taught nor suggested in the prior art, namely:

As to claim 1:

". . . a carrier consisting of an edible cellulosic plant material being 100% cabbage leaves prepared by one of forming into strands or granular form dried to a moisture content of at least below 8% by weight, said cabbage leaves having at least 30% intact cell walls; . . . "

As to claim 18:

". . . an edible cellulosic plant material being 100% cabbage leaves chopped or ground into a granular form and sized to pass a sixteen (16) mesh screen and be retained on a thirty (30) mesh screen of a U.S. standard sieve series of screens dried to a moisture content at or below 8% by weight, said granular cabbage leaves having at least 30% intact cell walls; . . ."

A. <u>Claims 1, 4-8, 18, and 24-25 are not anticipated by or obvious over Finberg.</u>

It is respectfully submitted that the rejection of claims 1, 4-8, 18, and 24-25 under 35 U.S.C. § 102(b) or in the alternative under 35 U.S.C. § 103(a) over Finberg U.S. Patent 3,067,068 is not well taken in view of the amendments to the claims and the arguments set forth below. Appellants' invention resides in the use of a cabbage leaf product that can produce either a flavor delivery system or a tobacco substitute using dried and chopped/ground cabbage leaves providing, if in granular form, they are sized within the teaching of the invention.

Furthermore, Appellants invention requires that the dried and sized cabbage leaves have at least 30% intact cell walls so that the cells can absorb added liquid water and soluble flavor.

Finberg teaches that the compositions must use papaya leaves and that only a satisfactory chewing tobacco/snuff replacement is achieved when using at least 28 per cent papaya leaves in its composition. It is true Finberg mentions cabbage as one of the many plant materials that can be used to dilute the papaya leaves, but Finberg teaches that cabbage leaves alone will not produce a satisfactory product and must be used only as a minor portion of a dominant papaya leaf product.

Furthermore, Finberg teaches flavoring of cabbage leaves prior to grinding/shredding. This method will not produce a product of sufficient quality to comprise 100% plant material in accord with his disclosure and claims. Furthermore, Finberg teaches a cabbage leaf alone treated in a manner he sets forth and used as a tobacco substitute is not satisfactory, but is only satisfactory as a papaya diluent.

Contrast this with Appellants' invention, which teaches the use of 100% cabbage leaves with grinding before flavoring being preferred and that at least 30% intact cell walls must remain after grinding and sizing of the cabbage leaves. The grinding before flavoring makes flavor penetration easier by fracturing some cells and thinning the cell walls of the intact cells. Furthermore, to have a slow flavor release, more like tobacco, Appellants teach that at least 30% of the intact cell walls must be present in the cabbage to adsorb the flavoring. With Appellants' invention it is possible to eliminate the papaya leaf required in the Finberg product.

Contrary to the Examiner's allegations, Finberg does not teach drying the initial product to a moisture content of 8 percent, rather Finberg is concerned with the final moisture content which may rise to at least 14% by weight. Finberg does not specifically teach the form in which the papaya leaves must be used and that, if they were in granular form they must be of a specific size range.

Contrary to the allegations by the Examiner, since Finberg does not specify size or size reduction or teach or suggest what methods are used and what the result is, there can be no interpretation of conditions without using Appellants' own teaching as to how much intact cell walls would be left in the papaya leaves.

It is respectfully submitted that the Examiner has used Appellants' own teaching to not only select the Finberg reference, but to interpret the reference. Clearly this is contrary to existing Patent Law. For example, to support this rejection the Examiner uses the phrase "it is presumed that the cabbage leaves of its invention inherently posses the characteristics since there is no requirement that during the processing of the chewing product, the leaf composition be handled in a manner that would break the cellular structure of the veggie material." Appellants bristle at this conclusion since there is no such teaching in Finberg and to make this conclusion the Examiner is stretching Finberg beyond the limits of the disclosure. In point of fact, such a characterization of Finberg can only be made using Appellants' teaching in combination with Finberg. Again, this is clearly contrary to the existing Patent Law. Furthermore, the Examiner states "in the alternative, the cell walls of Finberg would obviously be at least 30% intact due to the fact that the leaves comprising the chewing composition are merely mixed together, heated under pressure, and molded into a desired shape for subsequent shredding or the like."

There is no basis in Finberg for this conclusion and there is no teaching in the art that such a conclusion can be made by the Examiner. Appellants clearly challenge the Examiner to substantiate this conclusion. Here again, such a conclusion can only be reached by using Appellants' teaching to interpret Finberg.

Therefore, it is respectfully submitted that the rejection of claims 1, 4-8, 18, and 24-25 under 35 U.S.C. § 102(b) or in the alternative under 35 U.S.C. § 103(a) is not well taken and should be reversed.

B. <u>Claims 1, 4-6, 8, 18, 23 and 25 are not anticipated by or obvious over Aebi et al.</u>

Appellants respectfully submit Aebi et al. are concerned with preparing a low moisture vegetable product. The process of Aebi et al. comprises immersing the vegetable in a liquid bath containing an osmotic agent capable of fusing into the vegetable tissue and forming an amorphous solid upon drying. Once excess osmotic agent has been removed, the infused product is dried to form a vegetable product having a water content of from about 2 to 6% by weight which contains an amorphous, solid, osmotic agent. The preferred osmotic agent of Aebi et al. is a high fructose corn syrup.

The Examiner has rejected the claims saying that Aebi et al. prepares cabbage leaves in this way. However, it should be pointed out that at the end of the day while Aebi discloses a great deal of information about preserving vegetables the vegetables that are preserved are basically green bell peppers and onions, not cabbage.

While it is true Aebi may suggest that the size of the bell peppers or the onions are of 1/16 to 3/16 inch in thickness, there is no teaching of the size of the cabbage leaves which Aebi et al. tested in their example 8. The cabbage leaves according to Aebi et al. were soaked in a solution of 60% sucrose. Furthermore, it is apparent from the entire disclosure of Aebi et al. that the entire vegetable product must be infused with the osmotic agent. Therefore, Aebi would not be interested in further processing the product before treating with the osmotic agent and, nowhere do patentees disclose that the product should have anything less than 100% intact cell walls. From a fair reading of the Aebi et al. reference the only conclusion that

one can draw is that the product must be infused to achieve the aim which is preservation of the product not to achieve a chewable flavor delivery system or an oral tobacco substitute such as disclosed and claimed by Appellants. Appellants challenge the Examiner to substantiate the fact that Aebi et al. example 10 shows cabbage is ground so that it passes through a 20 mesh screen. While Aebi et al. may talk about sizing other products Aebi et al. neither teach or suggests sizing of a cabbage product other than by cutting it into strands. Furthermore, the Examiner uses phrases such as "while Aebi may not specifically state that the plant material has at least 30% intact cell walls, it is presumed that the cabbage leaves of its invention inherently posses this characteristic since it is clear that the disclosure teaches against damaging the leaf structure . . . ". Appellants again challenge the Examiner to prove that a worker skilled in the art would believe that such teaching is inherent and that furthermore such teaching can only be gleaned by fully applying Appellants' own teaching in interpreting the Aebi et al. teaching. Here again, the Examiner is using Appellants own teaching to interpret the reference which is clearly contrary to existing Patent Law. Nowhere, does Aebi et al. teach or suggest making a chewable flavor delivery system or an oral tobacco substitute using cabbage prepared in accord with the claims of Appellants. Furthermore, a fair reading of the Aebi et al. reference leads one to the conclusion that it is only applicable to preserving green bell peppers and onions, not to achieve a chewable product such as disclosed and claimed by Appellants.

Therefore, it is respectfully submitted that the rejection of claims 1, 4-6, 8, 18, 23 and 25 over Aebi et al. is not well taken and should be reversed.

C. <u>Claims 4-6 and 22-23 are not obvious over Finberg in view of Garber.</u>

In view of the arguments made above it is respectfully submitted that the Finberg reference is fatally defective. The mere fact that Garber teaches that chewing tobacco can be supplied in granular form without specifying particle size ranges, would not fill in deficiencies of the primary reference. Here again the Examiner is using Appellants own teaching to not only select but to interpret the references. Appellants take issue with the Examiner's conclusion that the

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combination of Finberg and Garber is viable, since there is no teaching or suggestion in either reference that the combination proposed by the Examiner would be viable.

Appellants have satisfied a long felt need in coming up with a chewable flavor delivery system that is made with natural materials and an oral tobacco substitute. Were Appellants invention obvious it surely would have been brought forth to the public before this, since the Finberg reference speaks from 1959 and the Garber reference from 1943. Were Appellants invention obvious it surely would have been brought forth long before their filing of the above-identified application. Appellants respectfully disagree with the Examiner's conclusion that the general conditions of the claims are disclosed in the prior art.

Therefore, in view of the foregoing it is respectfully submitted that the Final Rejection of claims 4-6 and 22-23 under 35 U.S.C. § 103(a) is not well taken and should be reversed.

D. <u>Claims 9 and 26 are not obvious over Aebi et al. in view of Nonumura et al.</u>

For the reasons set forth above, Appellants submit the Aebi et al. reference is fatally defective and neither teaches nor suggest their invention. It is respectfully submitted that the deficiencies of the Aebi reference can not be filled in by the Nonumura et al. reference without using Appellants' own teaching to interpret the references. Nonumura et al. do not teach freeze dried cabbage classified as brassica oleracea. Nonumura et al. do not have even a remote relationship to a flavor delivery system or a tobacco substitute using cabbage material as specified by Appellants.

Therefore, it is respectfully submitted that the Final Rejection of claims 9 and 26 under 35 U.S.C. § 103(a) is not well taken and should be reversed.

E. Claims 1 and 4-8 are not obvious over Rozacky et al.

Contrary to the allegation by the Examiner Rozacky et al. neither teach or suggest any specific plant (non-tobacco) or tree leaf material to be used in their process. While Rozacky et al. talk about using dried vegetable leaves to produce a tobacco substitute their tobacco substitute can be used either as a "smoking"

tobacco" or a "non-smoking tobacco". As pointed out above were one to put a match to Appellants' product it can no longer be useful as a flavor delivery system and in point of fact would be ruined. Contrary to the allegation by the Examiner, Rozacky et al. do not specifically teach or suggest that cabbage leaves can be used to produce a chewable flavor delivery system or an oral tobacco substitute. The only place that this conclusion can come from is Appellants' teaching. Here again, the Examiner has used Appellants' teaching to not only select but to interpret the reference. Furthermore, Rozacky et al.s' product must have a higher moisture content. Here again the Examiner is using an indefinite phrase "dried to a suitable" moisture content" to reject Appellants' claims by using Appellants' own teaching to interpret the reference. Furthermore, as pointed out to a fair degree by the Examiner, Rozacky et al. nowhere teach or suggest the fact that at least 30% intact cell walls must be present in the shredded material to achieve Appellants invention. This means that, according to the Examiner's logic the interpretation of the Rozacky et al. reference could mean that the vegetable product is shredded to the point where there are no intact cell walls. You can not make a disclosure that is specific, completely elastic and stretch it beyond the bounds of reasonable interpretation. Here again, the Examiner has fallen into the trap of using Appellants own teaching to not only select but to interpret the reference which is clearly contrary to existing Patent Law.

Therefore, in view of the foregoing it is respectfully submitted that the Final Rejection of claims 1 and 4-8 under 35 U.S.C. § 103(a) is not well taken and should be reversed.

F. <u>Claim 9 is not obvious over Rozacky et al. in view of Nonumura et al.</u>

For the reasons advanced above it is respectfully submitted that the Rozacky et al. reference is fatally defective in teaching or supporting Appellants' invention. Furthermore, while Nonumura et al. disclose planting of cabbage, the Nonumura et al. invention relates to enhancing carbon fixation in plants and not to producing a chewable flavor delivery system or an oral tobacco substitute. Here again, Appellants can not urge to strongly the fact that the Examiner has used their teaching to not only select but to interpret the reference. For the reasons set forth

above it is respectfully submitted that the rejection of claim 9 under 35 U.S.C. § 103(a) is not well taken and should be reversed.

IX. CONCLUSION

In view of the foregoing arguments, Appellants submit that the subject application is in condition for allowance. Appellants respectfully request that the Honorable Board reverse the Final Rejection of the pending claims in the application identified above.

In accordance with 37 C.F.R. § 1.192(a), this Appeal Brief is submitted in triplicate.

Respectfully submitted,

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Dated: January 12, 2004

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12 JANUARY 2004 Jame C Simme

APPENDIX

1. A chewable flavor delivery system comprising in combination:

a carrier consisting of an edible cellulosic plant material being 100% cabbage leaves prepared by one of, forming into strands or in grannular form dried to a moisture content of at or below 8% by weight, said cabbage leaves having at least 30% intact cell walls;

a water soluble but not water containing flavoring ingredient in liquid form and capable of entering intact cell walls of said cabbage leaves; and

an effective amount of a food safe humectant.

- 4. A delivery system according to claim 1, wherein said grannular cabbage leaves are sized to pass a 16 mesh and be retained on a 30 mesh screen of a U.S. Standard Sieve Series of screens.
- 5. A delivery system according to claim 4, wherein said grannular cabbage leaves are sized to pass a 16 mesh screen and be retained on a 20 mesh screen.
- 6. A delivery system according to claim 4, wherein said grannular cabbage leaves are sized to pass a 20 mesh screen and be retained on a 30 mesh screen.
- 7. A delivery system according to claim 1, wherein said humectant is selected from the group consisting of propylene glycol and glycerin.
- 8. A delivery system according to claim 1, including a minor amount of a sweetening agent.
- 9. A delivery system according to claim 1, wherein said cabbage leaves are freeze dried green cabbage classified as Brassica oleracea capitata.
 - 18. An oral tobacco substitute comprising in combination:

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an edible cellulose plant material being 100% cabbage leaves chopped or ground into a grannular form and sized to pass a 16 mesh screen and be retained on a 30 mesh screen of a U.S. Standard Sieve Series of screens dried to a moisture content at or below 8% by weight, said grannular cabbage leaves having at least 30% intact cell walls;

a water soluble but not water containing flavoring ingredient in liquid form and capable of entering intact cell walls of said grannular cabbage leaves; and

an effective amount of a food safe humectant.

- 22. A tobacco substitute according to claim 18, wherein said grannular cabbage is sized to pass a 16 mesh screen and be retained in a 20 mesh screen.
- 23. A tobacco substitute according to claim 21, wherein said grannular cabbage is sized to pass a 20 mesh screen and be retained on a 30 mesh screen.
- 24. A tobacco substitute according to claim 18, wherein said humectant is selected from the group consisting of propylene glycol and glycerin.
- 25. A tobacco substitute according to claim 18, including a minor amount of a sweetening agent.
- 26. A tobacco substitute according to claim 18, wherein said cabbage leaves are freeze dried green cabbage classified as Brassica oleracea capitata.